

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A reformer controlling apparatus, comprising:
 - a reformer having a catalyst unit including a catalyst promoting a steam reforming reaction and a catalyst for promoting a partial oxidation reaction;
 - a raw fuel gas supplier supplying raw fuel gas containing hydrocarbon and steam to said catalyst unit;
 - an oxidation gas supplier supplying oxidation gas containing oxygen to said catalyst unit;
 - a first reaction state detector detecting a state of a reaction progressing at an upstream portion of flows of said raw fuel gas and said oxidation gas in said catalyst unit;
 - a second reaction state detector detecting a state of a reaction in the whole of the catalysts in said catalyst unit;
 - a first corrector correcting feed amounts of said raw fuel gas and said oxidation gas, which are supplied to said catalyst unit, based on said state of the reaction detected by said second reaction state detector; and
 - a second corrector correcting ~~at least one of~~ the feed amount of said oxidation gas, which is supplied to said catalyst unit and a feed timing thereof, based on said state of the reaction detected by said first reaction state detector ~~and an amount of said oxidation gas corrected by said first corrector.~~
2. (Currently Amended) The reformer controlling apparatus according to claim 1, further comprising:
 - a third reaction state ~~detectors~~ detector; and
 - a detection signal switcher,wherein said first reaction state detector and said third reaction state ~~detectors~~ detector are set in plural positions, and a said detection signal switcher switches, with passage of time, a detection signal supplied to said second corrector among detection signals indicating said

reaction state detected by said first reaction state detector and said third reaction state ~~detectors~~ detector.

3. (Original) The reformer controlling apparatus according to claim 1, wherein said first reaction state detector detects a temperature state as said reaction state.

4. (Cancelled)

5. (Currently Amended) The reformer controlling apparatus according to claim 1, further comprising:

a third reaction state ~~detectors~~ detector; and

a maximum temperature selector,

wherein said first reaction state detector and said third reaction state ~~detectors~~ detector for detecting a temperature state are set in plural positions, and said maximum temperature selector selects the highest temperature among detected temperatures output from the first reaction state detector and said third reaction state ~~detectors~~ detector, and said second corrector uses an output of the maximum temperature selector.

6. (Original) The reformer controlling apparatus according to claim 1, wherein said second reaction state detector detects a temperature state as said reaction state.

7. (Currently Amended) A reformer controlling apparatus, comprising:

reforming means having a catalyst unit including a catalyst for promoting a steam reforming reaction and a catalyst for promoting a partial oxidation reaction;

raw fuel gas supplying means for supplying raw fuel gas containing hydrocarbon and steam to said catalyst unit;

oxidation gas supplying means for supplying oxidation gas containing oxygen to said catalyst unit;

first reaction state detecting means for detecting a state of a reaction progressing at an upstream portion of flows of said raw fuel gas and said oxidation gas in said catalyst unit;

second reaction state detecting means for detecting a state of a reaction in the whole of the catalysts in said catalyst unit;

first correcting means for correcting feed amounts of said raw fuel gas and said oxidation gas, which are supplied to said catalyst unit, based on said state of the reaction detected by said second reaction state detector means; and

second correcting means for correcting ~~at least one of~~ the feed amount of said oxidation gas, which is supplied to said catalyst unit and a feed timing thereof, based on said state of the reaction detected by said first reaction state detecting means ~~and said oxidation gas corrected by said first correcting means.~~

8. (Withdrawn) A method of controlling a reformer, comprising:

promoting a steam reform reaction and a partial oxidation reaction in a catalyst unit of said reformer;

supplying raw fuel gas containing hydrocarbon and steam to said catalyst unit by a raw fuel supplier;

supplying oxidation gas containing oxygen to said catalyst unit by an oxidation gas supplier;

detecting a state of a reaction progressing at an upstream portion of flows of said raw fuel gas and said oxidation gas in said catalyst unit by a first reaction state detector;

detecting a state of a reaction in the whole of the catalysts in said catalyst unit by a second reaction state detector;

correcting feed amounts of said raw fuel gas and said oxidation gas, which are supplied to said catalyst unit by a first corrector, based on said state of the reaction detected by said second reaction state detector; and

correcting the feed amount of said oxidation gas, which is supplied to said catalyst unit and/or a feed timing thereof by a second corrector, based on said state of the reaction detected by said first reaction state detector.